



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,875	05/08/2000	DONALD ARTHUR REYNOLDS	65008-018	4421

27305 7590 02/17/2004

HOWARD & HOWARD ATTORNEYS, P.C.  
THE PINEHURST OFFICE CENTER, SUITE #101  
39400 WOODWARD AVENUE  
BLOOMFIELD HILLS, MI 48304-5151

EXAMINER

FONTAINE, MONICA A

ART UNIT PAPER NUMBER

1732

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/486,875	Applicant(s) REYNOLDS, DONALD ARTHUR	
	Examiner Monica A Fontaine	Art Unit 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☒ This action is FINAL.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,9,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9,11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8 April 2002, 2 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

Claim 1 is objected to because of the following informalities: The word "resin" is misspelled in line 7. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eagles (U.S. Patent 2,364,962), in view of Mathellier (U.S. Patent 3,958,369). Regarding Claim 1, Eagles shows that it is known to carry out a method of forming a joint between two plastic extrusions having front and rear surfaces with solid material between said surfaces (Figure 2; Column 1, lines 1-5) comprising mitring the extrusions so they form the desired angle to one another at a mitre joint across the entire extrusion (Column 2, lines 18-36), removing a solid part of the rear face of each extrusion behind said front surfaces while maintaining the integrity of said front surface of each extrusion across the entire extrusion (Figure 4; Column 2, lines 36-44), placing the mitred extrusions in a mold and applying a material to restore the solid shape and bond the extrusions to one another across the mitred joint beneath the front surfaces and produce the desired joint configuration whereby the front surface of the joint is entirely defined by the

Art Unit: 1732

front surfaces of the original mitred extrusions (Figure 4; Column 2, lines 45-55; Column 5, lines 1-7). Eagles does not show injecting resin material to restore the solid shape and bond the extrusions together. Mathellier shows that it is known to carry out a method of forming a joint between two plastic extrusions wherein resin is injected to restore a cut-out corner area between two extrusions, thereby bonding the extrusions to one another across a mitred joint beneath the front surfaces and produce the desired joint configuration whereby the front surface of the joint is entirely defined by the front surfaces of the original mitred extrusions (Column 1, lines 18-58; Column 2, lines 40-55; Column 3, lines 34-36, 38-42, 51-68; Column 4, lines 1-4, 14-16, 27-28, 44-45, 51-56). Mathellier and Eagles are combinable because they are concerned with a similar technical field, namely, that of methods wherein corner sections are removed from tubular extrusions which are mitred together at a joint, then repaired by molding operations. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Mathellier's injection molding operation in Eagles' process in order to replace the removed corner section without having to require pre-made corner replacements which might not be of the correct dimensions for any specific mitred article.

Regarding Claim 9, Eagles shows that it is known to carry out a method of forming a joint between two plastic extrusions of solid material having front and rear surfaces (Figure 2; Column 1, lines 1-5) comprising the steps of mitring the extrusions at mitred ends across the entire extrusions so that they form the desired angle to one another at the mitred ends (Column 2, lines 18-36), removing solid portions of the rear surface of each extrusion along a line at the mitred ends behind the front surfaces to maintain the front surfaces across the entire extrusions to maintain the integrity of the front surfaces at the mitred ends across the entire extrusions (Figure

Art Unit: 1732

4; Column 2, lines 36-44), placing the mitred extrusions in a mold to form a mitred joint with the front surfaces abutting one another at the mitred joint across the entirety of the original extrusions (Figure 4; Column 2, lines 45-55; Column 5, lines 1-7), and supplying a material into the mold along the line to rebuild the removed portion entirely behind the front surfaces with a solid plastic material and bond the extrusions together across the mitred joint beneath the original front surfaces (Figure 4; Column 2, lines 45-55; Column 5, lines 1-7). Eagles does not show injecting resin material to restore the solid shape and bond the extrusions together. Mathellier shows that it is known to carry out a method of forming a joint between two plastic extrusions wherein resin is injected to restore a cut-out corner area between two extrusions, thereby bonding the extrusions to one another across a mitred joint beneath the front surfaces and produce the desired joint configuration whereby the front surface of the joint is entirely defined by the front surfaces of the original mitred extrusions (Column 1, lines 18-58; Column 2, lines 40-55; Column 3, lines 34-36, 38-42, 51-68; Column 4, lines 1-4, 14-16, 27-28, 44-45, 51-56). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Mathellier's injection molding operation in Eagles' process in order to replace the removed corner section without having to require pre-made corner replacements which might not be of the correct dimensions for any specific mitred article.

Regarding Claim 11, Eagles shows the process as claimed as discussed in the rejection of Claim 9 above, but does not show injecting plastic material to form a continuation of a sealing lip. Mathellier shows that it is known to carry out a method of forming a joint between two plastic extrusions including at least one sealing lip on the rear surface and injecting the plastic material into the mold to form a continuation of the sealing lip between the extrusions (Column

Art Unit: 1732

3, lines 18-26, 38-41, 57-65; Column 4, lines 1-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Mathellier's method to inject a continuation of a sealing lip with Eagles' process in order to prevent leakage of the final product.

Regarding Claim 12, Eagles shows the process as claimed as discussed in the rejection of Claim 9 above, but does not show forming structures that retain the extrusions to a structure. Mathellier shows that it is known to carry out a method of forming a joint between two plastic extrusions including male foot portions for insertion into a channel to retain the extrusions to a structure and injecting the plastic material into the mold to form at least one extension of the foot portions (Figures 3-6; Column 3, lines 34-68; Column 4, lines 1-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Mathellier's method to inject male foot portions with Eagles' process in order to prevent the mitred joint article from slipping off its intended structure.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 9, 11, and 12 have been considered but are moot in view of the new ground(s) of rejection (specifically, applicant's amendment of "across the entire extrusions" to claims 1 and 9).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent is cited to further show the state of the art with regard to forming extrusions and joints in general:

U.S. Patent 5,699,603 to Backes et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianne can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*maf*

Maf  
February 6, 2004



MICHAEL COLAIANNI  
PRIMARY EXAMINER